REMARKS

[0010] Applicant respectfully requests reconsideration and allowance of all of the claims of the application. The status of the claims is as follows:

- Claims 1, 5, 6, 8, 10-15, 17-19, and 21-52 are currently pending
- Claim 7 is canceled herein
- Claims 1, 14, 15, 19, 23, 25, and 40 are amended herein
- New claims 46-52 added herein

Cited Documents

[0011] The following documents have been applied to reject one or more claims of the Application:

- ***Stelovsky***: ***Stelovsky***, U.S. Patent No. ***5,782,692***
- ***Wang***: ***Wang***, U.S. Patent Application Publication No. ***20020133764***
- ***Hansen***: ***Hansen, et al.***, U.S. Patent Application Publication No. ***20020038456***
- ***Umeda***: ***Umeda, et al.***, U.S. Patent No. ***5,453,570***
- ***Golin***: ***Golin***, U.S. Patent No. ***5,990,980***
- ***Osberger***: ***Osberger***, U.S. Patent No. ***6,670,963***
- ***Geigel***: ***Geigel, et al.***, U.S. Patent Application Publication No. ***20020122067***
- ***Bloom***: ***Bloom, et al.***, U.S. Patent Application Publication No. ***20050042591***
- ***Tsai***: ***Tsai***, U.S. Patent No. ***6,572,381***
- ***Tashiro***: ***Tashiro, et al.***, U.S. Patent No. ***5,703,308***

- ***Trovato***: ***Trovato, et al.***, U.S. Patent No. ***7,058,889***
- ***Kondo***: ***Kondo***, U.S. Patent No. ***6,232,540***
- ***Borden, IV***: ***Borden, IV, et al.***, U.S. Patent Application Publication No. ***20030200105***
- ***Haitsma***: ***Haitsma, et al.***, U.S. Patent Application Publication No. ***20020178410***

Claims 1, 5-8, 10, 17, 18, 23-25, 28, 29, 32, 33, 40, 41, and 46-52 Are Non-Obvious Over Stelovksy in view of Wang further in view of Hansen, Umeda, Golin, and Osberger

[0012] Claims 1, 5-8, 10, 17, 18, 23-25, 28, 29, 32, 33, 40 and 41 stand rejected under 35 U.S.C. § 103(a) as allegedly being obvious over Stelovksy in view of Wang further in view of Hansen, Umeda, Golin, and Osberger. Applicant respectfully traverses the rejection.

Independent Claim 1

[0001] Applicant submits that the combination of Stelovsky, Wang, Hansen, Umeda, Golin, and Osberger does not teach or suggest at least the following features as recited in this claim (with emphasis added):

- **"selecting a visual content according to the content, a user's preference, and a type of music with which the visual content is to be aligned"**

- "segmenting a visual content to produce a plurality of sub-shots at a maximum peak of a frame difference curve, wherein the visual content presents a story line and the segmenting is repeated until lengths of all sub-shots are shorter than a maximum of sub-shot length, the maximum of sub-short length being a little longer in duration than the maximum of music sub-clips **to facilitate the sub-short being truncated to equal a length of an aligned music sub-clip in a next step**"
- "selecting sub-shots from the plurality of sub-shots, the selecting comprising:

  filtering sub-shots from within the plurality of sub-shots according to importance and quality, **the filtering sub-short from within the plurality of sub-shorts according to importance comprising:**

  calculating an attention/importance index of each frame of the sub-shot based on a plurality of factors including object motion, camera motion, specific objects, and audio, if any, associated with the frame;

  calculating an attention/importance index of the sub-short by averaging the attention/importance index of each frame of the sub-short; and

  selecting the sub-shots by comparing the attention index of each sub-shot; and

  selecting sub-shots such that they are uniformly distributed **along a time line of the visual content to preserve the story line of the visual content**"

- "aligning sub-shots with music sub-clips, the aligning comprising:

  automatically shortening one or more of the plurality of sub-shots to a length of a corresponding music sub-clip from within the plurality of music sub-clips; and

  resolving differences in the number of sub-shorts and the number of music sub-clips"

- "displaying at least some of the plurality of sub-shots as a background to lyrics associated with the plurality of music sub-clips**, the displaying comprising:**

  merging the selected sub-shots into scenes by a plurality of grouping methods, the methods including:

  merging the sub-shorts by similarity; and

  merging based on a time-code or timestamp of the sub-shots; and

  producing a number of effects at transitions of the plurality of sub-shots"

[0002] Claim 1 presently recites in part "**selecting a visual content according to the content, a user's preference, and a type of music with which the visual content is to be aligned**".

[0003] After a review of the references cited by the Examiner, Applicant asserts that none of the cited references disclose these new features as presently recited in claim 1. These features have not previously been considered by the Examiner. These features are supported by the Application, as originally filed, at least at [0024].

[0004] Claim 1 presently recite in part "**the segmenting is repeated until lengths of all sub-shots are shorter than a maximum of sub-shot length, the maximum of sub-short length being a little longer in duration than the maximum of music sub-clips to facilitate the sub-short being truncated to equal a length of an aligned music sub-clip in a next step**".

[0005] The Examiner indicates,

11. Stelovsky teaches instructions for shortening some of the plurality of sub-shots to a length of a corresponding music sub-clip (the system displays the current segment's start and end points, so the author can select and edit the boundary points, Column 7, Lines 14-19). Stelovsky teaches instructions for obtaining lyrics from a file (textual track can be generated remotely and transmitted using communications means, Column 14, Lines 20-24); and coordinating delivery of the lyrics with the music using timing information contained within the file (Column 3, Lines 52-65). What Stelovsky, Wang, Hansen, and Umeda fail to teach is where segmenting is repeated until lengths of all sub-shots are shorter than a maximum of sub-shot length, the maximum of sub-shot length being a little longer in duration than the maximum of music sub-clips [Claim 1]. However, Applicant has not disclosed that having the sub-shots be a "little longer" in duration than the music sub-clips solves any stated problem or is for any particular purpose. Moreover, it appears that the arbitrary length of the sub-clips of Stelovsky or the Applicant's instant invention would perform equally well for synchronizing the sub-clips with a video. Accordingly, it would have been obvious to one of ordinary skill in the art, at the time the invention was made, to have modified Stelovsky such that lengths of all sub-shots are shorter than a maximum of sub-shot length, the maximum of sub-shot length being a little longer in duration than the maximum of music sub-clips, in light of Wang, Hansen, and Umeda, because such a modification would have been considered a mere design consideration, which fails to patentably distinguish over Stelovsky, Wang, Hansen, or Umeda [Claim 1].

See Office Action, p. 8 and 9.

[0006] The Examiner admits "what Stelovsky, Wang, Hansen, and Umeda fail to teach is where segmenting is repeated until lengths of all sub-shots are shorter than a maximum of sub-shot length, the maximum of sub-shot length being a little longer in duration than the maximum of music sub-clips" but states "Applicant has not disclosed that having the sub-shots be a 'little longer' in duration than the music sub-clips solves any stated problem or is for any particular purpose". Office Action, p. 9.

[0007] Applicant respectfully disagrees Examiner's assertion. Applicant specifically discloses in the Application, "this process by which shots are segmented into sub-shots may be repeated until the length of all sub-shots are smaller than the maximum sub-shot length" and "as will be seen below, the maximum sub-shot length should be somewhat longer in duration that the length of music sub-clips, so that the video sub-shots may be truncated to equal the length of the music sub-clips." [0034].

[0008] For the sole purpose of expediting prosecution, claim 1 presently recites in part "to facilitate the sub-short being truncated to equal a length of an aligned music sub-clip in a next step" to expressly show the purpose that "sub-shots shall be a little longer in duration than the maximum of music sub-clips".

[0009] Claim 1 presently recites in part, by partly incorporating the features of former claim 7,

"filtering sub-shots from within the plurality of sub-shots according to importance and quality, **the filtering sub-short from within the plurality of sub-shorts according to importance comprising:**

calculating an attention/importance index of each frame of the sub-shot based on a plurality of factors including object motion, camera motion, specific objects, and audio, if any, associated with the frame;

calculating an attention/importance index of the sub-short by averaging the attention/importance index of each frame of the sub-short; and

selecting the sub-shots by comparing the attention index of each sub-shot."

[0010] The Examiner, in the context of claim 7, indicates:

21. What Stelovsky, Wang, Hansen, and Umeda further fail to teach is wherein filtering the sub-shots according to importance comprises instructions for analyzing the camera motion, object motion, and specific objects within the subshots, and filtering the subshots according to the analysis [Claim 7], or wherein a visual content analyzer is configured to select from the sub-shots according to ranked importance, gauged by detection of color entropy, object motion, camera motion, or of a face within the sub-shot [Claims 10 & 32]. However, Osberger teaches selecting or filtering sub-shots by color information (Column 3, Lines 6-15), by camera or object motion (Column 7, Lines 7-37), or by specific objects, including faces, in a sub-shot (Column 8, Lines 40-54). Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made, to have used the various color, motion, and object detection in the video sub-shots, as described by Osberger, in the personalized karaoke system on Stelovsky, in light of Wang Hansen, and Umeda, in order to improve the prediction of visual importance of a sub-shot [Claims 7, 10, & 32].

Office Action, p. 14.

[0011] Osberger, col. 3 lines 9-15, describes "this image is first segmented by a segmentation algorithm into homogeneous regions using both luminance and color

information. The importance of each region with respect to seven features 11-17, including color, contrast, size, shape, location, background and skin, that are known to influence visual attention is then calculated".

[0012] Osberger at most only describes factors relating to "segmentation" of image. See Osberger, col. 3 lines 9-15. In contrast, claim 1 recites in part "filtering sub-shots from within the plurality of sub-shots according to importance and quality". The "segmentation" in Osberger is apparently different from "filtering" as recited by this claim on its face.

[0013] Further, claim 1 recites in part "calculating an attention/importance index of each frame of the sub-shot", calculating an attention/importance index of the sub-short by averaging the attention/importance index of each frame of the sub-short; and selecting the sub-shots by comparing the attention index of each sub-shot."

[0014] After a review of the references cited by the Examiner, Applicant asserts that none of the cited references disclose these new features as presently recited in claim 1. These features have not previously been considered by the Examiner. These features are supported by the Application, as originally filed, at least at [0037] and [0038].

[0015] Claim 1 recites in part "**automatically** shortening one or more of the plurality of sub-shots to a length of a corresponding music sub-clip from within the plurality of music sub-clips"

[0016] The Examiner indicates:

11. Stelovsky teaches instructions for shortening some of the plurality of sub-shots to a length of a corresponding music sub-clip (the system displays the current segment's start and end points, so the author can select and edit the boundary points, Column 7, Lines 14-19).

Office Action, p. 8.

[0017] Stelovsky, col. 7 lines 14-19, describes "it allows the author to select one current segment from the sequence of segments. The current segment can be then edited. The author can insert a new segment at an arbitrary position in the sequence (e.g. before or after the current segment) and delete the current segment".

[0018] Stelovsky at most describes "select one current segment from the sequence of segments".

[0019] Applicant respectfully request the Examiner to point out specific language in Stelovsky that discloses "automatically shortening one or more of the plurality of sub-shots **to a length of a corresponding music sub-clip from within the plurality of music sub-clips**".

[0020] In addition, the Examiner indicates that Stelovsky describes "the **author** can select and edit the boundary points". Office Action, p. 8. In contrast, claim 1 presently recites in part "**automatically** shortening ... subshots".

[0021] Claim 1 presently recites in part "selecting sub-shots such that they are uniformly distributed along a time line of the visual content to **preserve the story line of the visual content**".

[0022] The Examiner indicates:

9. What Stelovsky, Wang, and Hansen fail to explicitly teach is where the uniformly distributed sub-shots preserve a storyline represented by the visual content [Claims 1, 23, 25, & 40]. However, Umeda teaches a karaoke authoring apparatus in which the segmented video images may be a series of pictures, scenes, dynamic images, or still pictures presenting a story (Column 4, Lines 23-31). The sub-shots of Stelovsky, selected in a uniform distribution over a timeline of a video, as taught by Hansen, would preserve a chronological story as taught by Umeda. Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made, to preserve a storyline represented by the visual content, as taught by Umeda, in the karaoke system and method of Stelovsky, in light of the teachings of Wang and Hansen, in order to avoid placing sub-shots out of their natural chronological order, such that an order of events is preserved logically [Claims 1, 23, 25, & 40].

Office Action, p. 7.

[0023] Umeda, col. 4 lines 28-31, describes "the segmented video images may be a series of pictures presenting a story, or a collection of unrelated scenes, or dynamic images or still pictures". Umeda only shows that the segment video images present a story.

[0024] In contrast, claim 1 recites in part "**preserve the story line of the visual content**" by "selecting sub-shots from the filtered sub-shots such that they are uniformly distributed within the visual content".

[0025] Applicant actually warns the possibility that the segment may present a different story from the original video in the Application. For example, Applicant describes "a second guideline indicates that, for a given video, the most "important" segments according to an importance measure could concentrate in one or in a few parts of the time line of the original video. However, selection of only these highlights

may actually obscure the storyline found in the original video. Accordingly, the distribution of the selected highlight video should be as uniform along the time line as possible so as to preserve the original storyline." Application, [0062].

[0026] Claim 1 presently recites in part "**selecting sub-shots** such that they are **uniformly distributed along a timeline of the visual content** to preserve the story line of the visual content".

[0027] The Examiner indicates:

> 10. What Stelovsky, Wang, and Umeda fail to teach is selecting sub-shots such that they are uniformly distributed within the video [Claims 1, 23, 25 & 40]. However, Hansen teaches a system and method for automatically producing media content by creating video subclips called "microchannels" by a "microchannel creator" that determines the desired channel content based upon uniform distribution of video, video and audio, still images and mosaics of different locations (The channel creator then accesses the individual clips from the database and creates the continuous stream or "microchannel." The continuous stream is defined by a concatenated stream of output, whether it be a series of images, video and audio, or other forms of media; The microchannel creator makes the following decisions when creating a microchannel: (i) what type of media should be sent at a given time (video, audio, image); (ii) what triggers should be given priority, assuming multiple triggers are defined for the microchannel; (iii) when advertising

should be inserted into the video stream, and what advertising should be provided; and (iv) when the database should be accessed for pre-recorded clips that are not currently posted to the microchannel as new clips. The channel creator runs via decision algorithms that are determined by the desired channel content for the microchannel. This is best illustrated by example. Considering a hypothetical travel-related site, the following type of microchannel might be desired: (i) commercials should be presented once per minute in ten second maximum durations; (ii) uniform distribution of video, video and audio, still images and mosaics of different locations; (iii) emphasis on video content using activity triggers on beach cams and urban cams; (iv) emphasis on mosaic content using periodic triggering without motion for panoramic cameras; (v) emphasis on still image content for interior cameras, such as restaurant cameras; (vi) live, real-time clips during daylight hours; and (vii) pre-recorded clips during night hours when beach activity has ceased, Para. 0085-88). As best understood, Hansen teaches selecting "microchannels" uniformly from a source. The "microchannel creator" of Hanson would be used in the device of Stelovsky to uniformly select video and photographic content. Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made, to selecting sub-shots such that they are uniformly distributed within the video, as taught by Hansen, in the device of Stelovsky, in light of Wang and Umeda, in order to automatically produce and distribute media content to a targeted audience, for providing more interesting and representative content [Claims 1, 23, 25 & 40].

Office Action, p. 7 and 8.

[0028] Hansen at most describes "uniform distribution of video, video and audio, still images and mosaics **of different locations**". [0088].

[0029] In contrast, claim 1 presently recites "**selecting sub-shots** such that they are **uniformly distributed along a timeline of the visual content** to preserve the story line of the visual content".

[0030] Applicant requests the Examiner to point out specific language in Hansen that discloses "selecting sub-shots such that they are **uniformly distributed along a timeline of the visual content** to preserve the story line of the visual content" as recited by this claim.

[0031] Claim 1 presently recites in part

- "resolving differences in the number of sub-shorts and the number of music sub-clips"
- "the displaying comprising:

  merging the selected sub-shots into scenes by a plurality of grouping methods, the methods including:

  merging the sub-shorts by similarity; and

  merging the sub-shots based on a time-code or timestamp of the sub-shots; and

  producing a number of effects at transitions of the plurality of sub-shots"

[0032] After a review of the references cited by the Examiner, Applicant asserts that none of the cited references disclose these new features as presently recited in claim 1. These features have not previously been considered by the Examiner. These features are supported by the Application, as originally filed, at least at [0068] and [0073].

[0033] As shown above, the combination of Stelovsky, Wang, Hansen, Umeda, Golin, and Osberger does not teach or suggest all of the elements and features of this claim. Accordingly, Applicant asks the Examiner to withdraw the rejection of this claim.

Independent Claim 23

[0034] Applicant submits that the combination of Stelovsky, Wang, Hansen, Umeda, Golin, and Osberger does not teach or suggest at least the following features as recited in this claim (with emphasis added):

- "segmenting a visual content representing a story line to produce a plurality of sub-shots of a length corresponding music sub-clips from the plurality of music sub-clips, **such that the plurality of sub-shots are uniformly distributed along a time line of the visual content to preserve the story line of the visual content**"

[0035] Claim 23 recited in part "**the plurality of sub-shots are uniformly distributed along a time line of the visual content to preserve the story line of the visual content**".

[0036] The Examiner relies on Umeda to suggest or teach the features of "story line". See Office Action, p. 7 paragraph 9.

[0037] Umeda, col. 4 lines 28-31, describes "the segmented video images may be a series of pictures presenting a story, or a collection of unrelated scenes, or dynamic images or still pictures". Umeda only shows that the segment video images present a story.

[0038] In contrast, claim 23 recites in part "**preserve the story line of the visual content**".

[0039] Applicant actually warns the possibility that the segment may present a different story from the original video in the Application. For example, Applicant describes "a second guideline indicates that, for a given video, the most "important" segments according to an importance measure could concentrate in one or in a few parts of the time line of the original video. However, selection of only these highlights may actually obscure the storyline found in the original video. Accordingly, the distribution of the selected highlight video should be as uniform along the time line as possible so as to preserve the original storyline." Application, [0062].

[0040] The Examiner relies on Hansen to suggest or teach the features of "uniform distribution". See Office Action, p. 7 paragraph 10.

[0041] Hansen at most describes "uniform distribution of video, video and audio, still images and mosaics **of different locations**". [0088].

[0042] In contrast, claim 23 presently recites "**the plurality of sub-shots are uniformly distributed along a time line of the visual content**".

[0043] Applicant requests the Examiner to point out specific language in Hansen that discloses "**the plurality of sub-shots are uniformly distributed along a time line of the visual content**" as recited by this claim.

[0044] As shown above, the combination of Stelovsky, Wang, Hansen, Umeda, Golin, and Osberger does not teach or suggest all of the elements and features of this claim. Accordingly, Applicant asks the Examiner to withdraw the rejection of this claim.

Independent Claim 25

[0045] Applicant submits that the combination of Stelovsky, Wang, Hansen, Umeda, Golin, and Osberger does not teach or suggest at least the following features as recited in this claim (with emphasis added):

- "a visual content analyzer configured to define and select visual content sub-shots, wherein the visual content analyzer is configured to **select sub-shots of greater importance consistent with creating a uniform distribution of the sub-shots over a runtime of a source video, wherein the source video presents a story line and the sub-shots preserve the story line of the source video**"

[0046] Claim 25 recited in part "**select sub-shots of greater importance consistent with creating a uniform distribution of the sub-shots over a runtime of a source video, wherein the source video presents a story line and the sub-shots preserve the story line of the source video**".

[0047] The Examiner relies on Umeda to suggest or teach the features of "story line". See Office Action, p. 7 paragraph 9.

[0048] Umeda, col. 4 lines 28-31, describes "the segmented video images may be a series of pictures presenting a story, or a collection of unrelated scenes, or dynamic images or still pictures". Umeda only shows that the segment video images present a story.

[0049] In contrast, claim 25 recites in part "**preserve the story line of the source video**".

[0050] Applicant actually warns the possibility that the segment may present a different story from the original video in the Application. For example, Applicant describes "a second guideline indicates that, for a given video, the most "important" segments according to an importance measure could concentrate in one or in a few parts of the time line of the original video. However, selection of only these highlights may actually obscure the storyline found in the original video. Accordingly, the distribution of the selected highlight video should be as uniform along the time line as possible so as to preserve the original storyline." Application, [0062].

[0051] The Examiner relies on Hansen to suggest or teach the features of "uniform distribution". See Office Action, p. 7 paragraph 10.

[0052] Hansen at most describes "uniform distribution of video, video and audio, still images and mosaics **of different locations**". [0088].

[0053] In contrast, claim 25 presently recites "**a uniform distribution of the sub-shots over a runtime of a source video**".

[0054] Applicant requests the Examiner to point out specific language in Hansen that discloses "**a uniform distribution of the sub-shots over a runtime of a source video**" as recited by this claim.

[0055] As shown above, the combination of Stelovsky, Wang, Hansen, Umeda, Golin, and Osberger does not teach or suggest all of the elements and features of this claim. Accordingly, Applicant asks the Examiner to withdraw the rejection of this claim.

Independent Claim 40

[0056] Applicant submits that the combination of Stelovsky, Wang, Hansen, Umeda, Golin, and Osberger does not teach or suggest at least the following features as recited in this claim (with emphasis added):

- "means for defining and selecting visual content sub-shots from a visual content, such that **the sub-shots are uniformly distributed along a time line of the visual content, wherein the visual content presents a story line and the sub-shots preserve the story line of the visual content**"

[0057] Claim 40 recited in part "**the sub-shots are uniformly distributed along a time line of the visual content, wherein the visual content presents a story line and the sub-shots preserve the story line of the visual content**".

[0058] The Examiner relies on Umeda to suggest or teach the features of "story line". See Office Action, p. 7 paragraph 9.

[0059] Umeda, col. 4 lines 28-31, describes "the segmented video images may be a series of pictures presenting a story, or a collection of unrelated scenes, or dynamic images or still pictures". Umeda only shows that the segment video images present a story.

[0060] In contrast, claim 40 recites in part "**preserve the story line of the visual content**".

[0061] Applicant actually warns the possibility that the segment may present a different story from the original video in the Application. For example, Applicant describes "a second guideline indicates that, for a given video, the most "important"

segments according to an importance measure could concentrate in one or in a few parts of the time line of the original video. However, selection of only these highlights may actually obscure the storyline found in the original video. Accordingly, the distribution of the selected highlight video should be as uniform along the time line as possible so as to preserve the original storyline." Application, [0062].

[0062] The Examiner relies on Hansen to suggest or teach the features of "uniform distribution". See Office Action, p. 7 paragraph 10.

[0063] Hansen at most describes "uniform distribution of video, video and audio, still images and mosaics **of different locations**". [0088].

[0064] In contrast, claim 40 presently recites "**the sub-shots are uniformly distributed along a time line of the visual content**".

[0065] Applicant requests the Examiner to point out specific language in Hansen that discloses "**the sub-shots are uniformly distributed along a time line of the visual content**" as recited by this claim.

[0066] As shown above, the combination of Stelovsky, Wang, Hansen, Umeda, Golin, and Osberger does not teach or suggest all of the elements and features of this claim. Accordingly, Applicant asks the Examiner to withdraw the rejection of this claim.

Dependent Claims 5-8, 10, 17, 18, 24, 28, 29, 32, 33, 41, and 47-52

[0013] Claims 5-8, 10, 17, 18, 23, 24, 28, 29, 32, 33, 41 and 47-52 ultimately depend from independent claims 1, 23, 25, and 40. As discussed above, claims 1, 23, 25, and 40 are allowable over the cited documents. Therefore, claims 5-8, 10, 17, 18, 23, 24, 28, 29, 32, 33, 41, and 47-52 are also allowable over the cited documents of record for

at least their dependency from an allowable base claim. These claims may also be allowable for the additional features that each recites.

Dependent Claim 17

[0067] Applicant submits that the combination of Stelovsky, Wang, and Hansen does not teach or suggest at least the following features as recited in this claim (with emphasis added):

- "segmenting music into the plurality of music sub-clips comprises bounding music sub-clip length according to:
  minimum length = min{max{2* tempo, 2}, 4} and
  maximum length = minimum + 2"

[0068] The Examiner asserts that these features do not solve any problem or are for any particular purpose. Office Action, page 12, paragraph 16.

[0069] Applicant respectfully disagrees with the assertion. Applicant would like to bring the Examiner's attention to the Application, paragraph [0017], lines 6-7, and [0091], line 2 which states "to give a more enjoyable karaoke performance, the sub-music should not be too short or too long" and "a range is set as a function of tempo".

Dependent Claim 18

[0070] Applicant submits that the combination of Stelovsky, Wang, and Hansen does not teach or suggest at least the following features as recited in this claim (with emphasis added):

- "establishing music sub-clips' length within a range of 3 to 5 seconds"

[0071] The Examiner asserts that these features do not solve any problem or are for any particular purpose. Office Action, page 12, paragraph 16.

[0072] Applicant respectfully disagrees with the assertion. Applicant would like to bring the Examiner's attention to the Application, paragraph [0017], lines 6-8 which states "to give a more enjoyable karaoke performance, the sub-music should not be too short or too long" and "an advantageous length of music sub-clip is about 3 to 5 seconds".

Dependent Claims 47-52

[0073] Applicant submits that the combination of Stelovsky, Wang, Hansen, Umeda, Golin, and Osberger does not teach or suggest at least the following features as recited in these claims:

47. (New) The processor-readable medium as recited in claim 15, wherein the one or more photographs are grouped into three tiers including: a date that the photograph is taken, a scene within the photograph, and whether the photo is a member of a group of very similar photographs,

wherein the scene represents a group of photographs that, while not as similar as those which fall under the group of very similar photos, are taken at a same time and place.

48. **(New)** The processor-readable medium as recited in claim 47, wherein the date and scene are used to determine the number of effects at transition of the one or more photos and photos fall within a group of very similar photos are filtered out.

49. **(New)** The processor-readable medium as recited in claim 48, wherein the photographs are firstly grouped into a top-tier based on the date, then a hierarchical clustering algorithm with different similarity thresholds is used to group the lower two layers,

wherein the photographs with a lower degree of similarity are grouped together as the scene.

50. **(New)** The processor-readable medium as recited in claim 1, wherein the number of effects at transitions of the plurality of sub-shots are selected randomly in a plurality of specific effect sets or determined by a style.

51. **(New)** The processor-readable medium as recited in claim 50, the style includes a day-by-day style, wherein a title is added when a new day starts before a first sub-shot of the day to illustrate the creating of the sub-shots coming next.

52. **(New)** The processor-readable medium as recited in claim 50, the style includes an old movie style, wherein sepia tone or grayscale effect is added on the sub-shots.

[0074] After a review of the references cited by the Examiner, Applicant asserts that none of the cited references disclose these new features as presently recited in claims 47-52. These features have not previously been considered by the Examiner. These features are supported by the Application, at least at [0045]-[0047] and [0068]-[0070].

Claims 12-15, 31, 34-38, and 43 Are Non-Obvious Over Stelovsky, in view of Wang, Hansen, Umeda, Golin, and Osberger and further in view of Geigel

[0014] Claims 12-15, 31, 34-38, and 43 stand rejected under 35 U.S.C. § 103(a) as allegedly being obvious over Stelovsky, in view of Wang, Hansen, Umeda, Golin, and Osberger and further in view of Geigel. Applicant respectfully traverses the rejection.

[0015] Claims 12-15, 31, 34-38, and 43 ultimately depend from independent claims 1, 25, and 40. As discussed above, claims 1, 25, and 40 are allowable over the cited documents. Therefore, claims 12-15, 31, 34-38, and 43 are also allowable over the cited documents of record for at least their dependency from an allowable base claim. These claims may also be allowable for the additional features that each recites.

Dependent Claim 14

[0075] Applicant submits that the combination of Stelovsky, Wang, Hansen, Umeda, Golin, Osberger, and Geigel does not teach or suggest at least the following features as recited in these claims (with emphasis added):

- "converting at least one of the photographs to video, **wherein camera angles change, zoon and pan the photograph**"

[0076] Claim 14 presently recites in part "**camera angles change, zoon and pan the photograph**".

[0077] After a review of the references cited by the Examiner, Applicant asserts that none of the cited references disclose these new features as presently recited in claim 1. These features have not previously been considered by the Examiner. These features are supported by the Application, as originally filed, at least at [0025].

Dependent Claim 15

[0078] Applicant submits that the combination of Stelovsky, Wang, Hansen, Umeda, Golin, Osberger, and Geigel does not teach or suggest at least the following features as recited in these claims (with emphasis added):

- "the visual content comprises one or more videos or photographs in digital formats, **in an event that both video and photograph are used, each photograph is regarded as a video shot**"

[0079] Claim 15 presently recites in part "**in an event that both video and photograph are used, each photograph is regarded as a video shot**".

[0080] After a review of the references cited by the Examiner, Applicant asserts that none of the cited references disclose these new features as presently recited in claim 1. These features have not previously been considered by the Examiner. These features are supported by the Application, as originally filed, at least at [0042].

Claims 19, 39, and 44 Are Non-Obvious Over Stelovsky, in view of Wang, Hansen, Umeda, Golin, and Osberger, and further in view of Bloom

[0016] Claims 19, 39, and 44 stand rejected under 35 U.S.C. § 103(a) as allegedly being obvious over Stelovsky, in view of Wang, Hansen, Umeda, Golin, and Osberger, and further in view of Bloom. Applicant respectfully traverses the rejection.

[0017] Claims 19, 39, and 44 ultimately depend from independent claims 25 and 40. As discussed above, claims 25 and 40 are allowable over the cited documents. Therefore, claims 19, 39, and 44 are also allowable over the cited documents of record for at least their dependency from an allowable base claim. These claims may also be allowable for the additional features that each recites.

Claim 21 Is Non-Obvious Over Stelovsky in view of Wang, Hansen, and Umeda and further in view of Tsai

[0018] Claim 21 stands rejected under 35 U.S.C. § 103(a) as allegedly being obvious over Stelovsky in view of Wang, Hansen, and Umeda and further in view of Tsai. Applicant respectfully traverses the rejection.

[0019] Claim 21 ultimately depends from independent claim 1. As discussed above, claim 1 is allowable over the cited documents. Therefore, claim 21 is also allowable over the cited documents of record for at least their dependency from an allowable base claim. This claim may also be allowable for the additional features that it recites.

Claim 22 Is Non-Obvious Over Stelovsky in view of Wang, Hansen, Umeda, Golin, and Osberger and further in view of Tashirl

[0020] Claim 22 stands rejected under 35 U.S.C. § 103(a) as allegedly being obvious over Stelovsky in view of Wang, Hansen, Umeda, Golin, and Osberger and further in view of Tashirl. Applicant respectfully traverses the rejection.

[0021] Claim 22 ultimately depends from independent claim 1. As discussed above, claim 1 is allowable over the cited documents. Therefore, claim 22 is also allowable over the cited documents of record for at least their dependency from an allowable base claim. This claim may also be allowable for the additional features that it recites.

Claim 26 Is Non-Obvious Over Stelovsky in view of Wang, Hansen, Umeda, Golin, and Osberger, and further in view of Trovato

[0022] Claim 26 stands rejected under 35 U.S.C. § 103(a) as allegedly being obvious over Stelovsky in view of Wang, Hansen, Umeda, Golin, and Osberger, and further in view of Trovato. Applicant respectfully traverses the rejection.

[0023] Claim 26 ultimately depends from independent claim 25. As discussed above, claim 25 is allowable over the cited documents. Therefore, claim 26 is also allowable over the cited documents of record for at least their dependency from an allowable base claim. This claim may also be allowable for the additional features that it recites.

Claim 27 Is Non-Obvious Over Stelovsky in view of Wang, Hansen, Umeda, Golin, and Osberger, and further in view of Kondo

[0024] Claim 27 stands rejected under 35 U.S.C. § 103(a) as allegedly being obvious over Stelovsky in view of Wang, Hansen, Umeda, Golin, and Osberger, and further in view of Kondo. Applicant respectfully traverses the rejection.

[0025] Claim 27 ultimately depends from independent claim 25. As discussed above, claim 25 is allowable over the cited documents.. Therefore, claim 27 is also allowable over the cited documents of record for at least their dependency from an allowable base claim. This claim may also be allowable for the additional features that it recites.

Claims 30 and 42 Are Non-Obvious Over Stelovsky, Wang, Hansen, Umeda, Golin, and Osberger, in view of Borden IV

[0026] Claims 30 and 42 stand rejected under 35 U.S.C. § 103(a) as allegedly being obvious over Stelovsky, Wang, Hansen, Umeda, Golin, and Osberger, in view of Borden IV. Applicant respectfully traverses the rejection.

[0027] Claims 30 and 42 ultimately depend from independent claims 25 and 40. As discussed above, claims 25 and 40 are allowable over the cited documents. Therefore, claims 30 and 42 are also allowable over the cited documents of record for at least their dependency from an allowable base claim. These claims may also be allowable for the additional features that each recites.

Claims 11 and 45 Are Non-Obvious Over Stelovsky, Wang, Hansen, Umeda, Golin, and Osberger, and further in view of Haitsma

[0028] Claims 11 and 45 stand rejected under 35 U.S.C. § 103(a) as allegedly being obvious over Stelovsky, Wang, Hansen, Umeda, Golin, and Osberger, and further in view of Haitsma. Applicant respectfully traverses the rejection.

[0029] Claims 11 and 45 ultimately depend from independent claims 1 and 40. As discussed above, claims 1 and 40 are allowable over the cited documents. Therefore, claims 11 and 45 are also allowable over the cited documents of record for at least their dependency from an allowable base claim. These claims may also be allowable for the additional features that each recites.

Conclusion

[0030] Applicant respectfully requests reconsideration and prompt issuance of the application. If any issues remain that prevent issuance of this application, the Examiner is urged to contact the undersigned representative for the Applicant before issuing a subsequent Action.

Respectfully Submitted,

Lee & Hayes, PLLC
Representative for Applicant

/kaseychristie40559/ Dated: 7/16/2009

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